## SBE Postdoctoral Research Fellowships (SPRF)

## **PROGRAM SOLICITATION**

NSF 12-591

# REPLACES DOCUMENT(S): NSF 09-595



### National Science Foundation

Directorate for Social, Behavioral & Economic Sciences SBE Office of Multidisciplinary Activities

Full Proposal Deadline(s) (due by 5 p.m. proposer's local time):

October 29, 2012

Last Monday in October, Annually Thereafter

## **IMPORTANT INFORMATION AND REVISION NOTES**

The significant changes in the new SBE MPRF solicitation are listed below:

- Name of the program is changed to "SBE Postdoctoral Research Fellowships (SPRF)". Previously, the program name was
  "SBE Minority Postdoctoral Research Fellowships (MPRF)".
- The revised program has two tracks: (i) Broadening Participation, SPRF-BP, and (ii) Interdisciplinary Research in Behavioral and Social Sciences, SPRF-IBSS. The BP track subsumes the previous MPRF program, and the IBSS track is a new addition.
- Proposals will be submitted from institutions; roles (PI, co-PI, Senior Personnel) of the sponsoring scientist(s) and the
  postdoctoral fellowship candidate will be determined according to institutional regulations (previously proposals were
  submitted by, and awards were made to, individuals).
- Ph.D. degree of the fellowship candidate must have been obtained within 24 months before application deadline (previously
  was within 30 months) or within 10 months after the application deadline (previously was 12 months).
- The Sponsoring Scientist's statement must be incorporated into the project description as a separate section (previously
  was submitted as a separate letter).
- Individuals already in full-time tenure-track faculty positions are not eligible to apply (previously they could apply with a letter
  from the Department Chair stating that if the fellowship were to be awarded, the awardee would be allowed a two-year
  leave of absence).
- Follow-up Research Starter Grants are no longer offered.
- All awards are for a maximum of two years; three-year awards and third year extensions are not allowed (previously were allowed in special cases).

## Important Reminders

A revised version of the NSF Proposal & Award Policies & Procedures Guide (PAPPG), NSF 11-1, was issued on October 1, 2010 and is effective for proposals submitted, or due, on or after January 18, 2011. Please be advised that the guidelines contained in NSF 11-1 apply to proposals submitted in response to this funding opportunity.

Cost Sharing: The PAPPG has been revised to implement the National Science Board's recommendations regarding cost sharing. Inclusion of voluntary committed cost sharing is prohibited. In order to assess the scope of the project, all organizational resources necessary for the project must be described in the Facilities, Equipment and Other Resources section of the proposal. The description should be narrative in nature and must not include any quantifiable financial information. Mandatory cost sharing will only be required when explicitly authorized by the NSF Director. See the PAPP Guide Part I: *Grant Proposal Guide (GPG)* Chapter II.C.2.g(xi) for further information about the implementation of these recommendations.

Data Management Plan: The PAPPG contains a clarification of NSF's long standing data policy. All proposals must describe plans for data management and sharing of the products of research, or assert the absence of the need for such plans. FastLane will not permit submission of a proposal that is missing a Data Management Plan. The Data Management Plan will be reviewed as part of the intellectual merit or broader impacts of the proposal, or both, as appropriate. Links to data management requirements and plans relevant to specific Directorates, Offices, Divisions, Programs, or other NSF units are available on the NSF website at: <a href="http://www.nsf.gov/bfa/dias/policy/dmp.jsp">http://www.nsf.gov/bfa/dias/policy/dmp.jsp</a>. See Chapter II.C.2.j of the GPG for further information about the implementation of this requirement.

## **SUMMARY OF PROGRAM REQUIREMENTS**

## **General Information**

**Program Title:** 

#### Synopsis of Program:

The Directorate for Social, Behavioral and Economic Sciences (SBE) offers Postdoctoral Research Fellowships in two tracks: (i) Broadening Participation (SPRF-BP), and (ii) Interdisciplinary Research in Behavioral and Social Sciences (SPRF-IBSS). See the full text of the solicitation for detailed description of these tracks.

#### Cognizant Program Officer(s):

Please note that the following information is current at the time of publishing. See program website for any updates to the points of contact.

- Fahmida N. Chowdhury Program Officer, telephone: (703) 292-4672, email: fchowdhu@nsf.gov
- Christina M. Jones Science Assistant, telephone: (703) 292-2960, email: chjones@nsf.gov

## Applicable Catalog of Federal Domestic Assistance (CFDA) Number(s):

• 47.075 --- Social Behavioral and Economic Sciences

#### **Award Information**

#### Anticipated Type of Award: Fellowship

Estimated Number of Awards: 15 Up to 15 total fellowships contingent upon the quality of the applications and availability of funds.

Anticipated Funding Amount: \$3,000,000 - Maximum anticipated funding amount is approximately \$3,000,000 per year contingent upon the quality of applications and availability of funds.

## **Eligibility Information**

## Organization Limit:

Proposals may only be submitted by the following:

- Universities and Colleges Universities and two- and four-year colleges (including community colleges)
  accredited in, and having a campus located in the US, acting on behalf of their faculty members. Such
  organizations also are referred to as academic institutions.
- Non-profit, non-academic organizations: Independent museums, observatories, research labs, professional societies and similar organizations in the U.S. associated with educational or research activities.

## PI Limit:

The Fellowship applicant must be a U.S. citizen, national, or legally admitted permanent resident alien of the United States and meet the additional criteria listed below in the program solicitation.

#### Limit on Number of Proposals per Organization:

None Specified

## Limit on Number of Proposals per PI: 1

The Fellowship candidate may be part of only one proposal, regardless of role (PI, co-PI, or Senior Personnel).

## **Proposal Preparation and Submission Instructions**

## A. Proposal Preparation Instructions

• Letters of Intent: Not Applicable

• Preliminary Proposal Submission: Not Applicable

- Full Proposals:
  - Full Proposals submitted via FastLane: NSF Proposal and Award Policies and Procedures Guide, Part I: Grant Proposal Guide (GPG) Guidelines apply. The complete text of the GPG is available electronically on the NSF website at: http://www.nsf.gov/publications/pub\_summ.jsp?ods\_key=gpg.
  - Full Proposals submitted via Grants.gov: NSF Grants.gov Application Guide: A Guide for the Preparation and Submission of NSF Applications via Grants.gov Guidelines apply (Note: The NSF Grants.gov Application Guide is available on the Grants.gov website and on the NSF website at: http://www.nsf.gov/publications/pub\_summ.jsp? ods\_key=grantsgovguide)

## **B. Budgetary Information**

- Cost Sharing Requirements: Inclusion of voluntary committed cost sharing is prohibited.
- Indirect Cost (F&A) Limitations: Not Applicable
- Other Budgetary Limitations: Other budgetary limitations apply. Please see the full text of this solicitation for further information.

#### C. Due Dates

• Full Proposal Deadline(s) (due by 5 p.m. proposer's local time):

October 29, 2012

Last Monday in October, Annually Thereafter

## **Proposal Review Information Criteria**

Merit Review Criteria: National Science Board approved criteria. Additional merit review considerations apply. Please see the full text of this solicitation for further information.

## **Award Administration Information**

Award Conditions: Additional award conditions apply. Please see the full text of this solicitation for further information.

Reporting Requirements: Additional reporting requirements apply. Please see the full text of this solicitation for further information.

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## I. INTRODUCTION

The National Science Foundation offers postdoctoral research fellowships to provide opportunities for recent doctoral graduates to obtain additional training, to gain research experience under the sponsorship of established scientists, and to broaden their scientific horizons beyond their undergraduate and graduate training. Postdoctoral fellowships are further designed to assist new scientists to direct their research efforts across traditional disciplinary lines and to avail themselves of unique research resources, sites, and facilities, including at foreign locations. NSF seeks to promote the participation of scientists from all segments of the scientific community, including those from under-represented groups, in its research programs and activities; the postdoctoral period is considered to be an important level of professional development in attaining this goal.

The goal of the SBE Postdoctoral Research Fellowship (SPRF) program is to enhance the participation of under-represented groups in science and engineering; promote interdisciplinary research; and encourage doctoral-level scientists (who are not yet in full-time positions) to take advantage of the two-year fellowships to prepare for scientific careers in academia, industry, and government.

## II. PROGRAM DESCRIPTION

II.1. Areas of Research: The Directorate for Social, Behavioral and Economic Sciences (SBE) supports research in a broad range of disciplines and in interdisciplinary areas through its Behavioral and Cognitive Sciences (BCS) Division, Social and Economic

Sciences (SES) Division, SBE Office of Multidisciplinary Activities (SMA), and National Center for Science and Engineering Statistics (NCSES). The prospective PI-teams (that is, Fellows and Mentors) should visit the web pages hyperlinked in this section to get detailed information of the research fields/themes/topics supported by the SBE Directorate. Any research field within the purview of the SBE sciences, as described in the above web sites, would be welcome. In the case of interdisciplinary research, at least one of the component fields should be within the SBE sciences. A particular, but not exclusive list of topics can be found in a recently published report entitled "Rebuilding the Mosaic". This report proposes four major topic areas of interest: population change; sources of disparities, for example in social, economic, or health contexts, and processes that alleviate those disparities; communication, language, and linguistics; and technology, new media, and social networks; these interest areas have been condensed from a lengthy and extensive process of community input.

II.2. Tracks: This SPRF program offers two tracks of Fellowships. For both of these tracks, proposals are encouraged from a wide range of doctoral-level investigators including those from groups that continue to be under-represented in their field. Some proposals may contain elements of both tracks; for example, an interdisciplinary proposal may focus on the science of broadening participation. In such cases it will be up to the potential Fellow to choose one dominant track.

Track 1. Broadening Participation (SPRF-BP): The SPRF-BP track offers fellowships in an effort to increase the diversity of researchers who participate in NSF programs in the social, behavioral and economic sciences and thereby increase the participation of scientists from under-represented groups in selected areas of science in the United States. NSF defines broadening participation in terms of individuals from under-represented groups as well as institutions and geographic areas that do not participate in NSF research programs at rates comparable to others. The problem of under-representation in the nation's scientific enterprise has been well-documented and reported in the literature; the BP track of the SPRF program invites proposals that address this issue either through the Fellow's scientific research or through well-designed and meaningful outreach and training activities. The research theme under the BP track can be anything that falls within the SBE sciences (see Section II.1 for details) at NSF, including (but not limited to) research on the topic of broadening participation (see SBE's Dear Colleague Letter NSF 12-037 for more details on the science of broadening participation). The Fellowship proposal as a whole should demonstrate how the proposed activities help increase the participation and advancement of under-represented groups in SBE fields or, in general, STEM fields. The broadening participation issue can be addressed directly (in case the research itself is on that topic), indirectly (through the broader impacts of the research, or by incorporating appropriate training and outreach activities), or both. In addition, successful proposals will demonstrate the integral role that the mentor will play in advancing the postdoctoral applicant's research and future career development.

In addition to the scientific research, all proposals for this (BP) track must include a specific section with the heading "How this fellowship will help broaden the participation of scientists from currently under-represented groups in the United States".

Track 2. Interdisciplinary Research in Behavioral and Social Sciences (SPRF-IBSS): The SPRF-IBSS track aims to support interdisciplinary training where at least one of the disciplinary components is an SBE science. As defined by the National Academies, "Interdisciplinary research is a mode of research by teams or individuals that integrates information, data, techniques, tools, perspectives, concepts, and/or theories from two or more disciplines or bodies of specialized knowledge to advance fundamental understanding or to solve problems whose solutions are beyond the scope of a single discipline or area of research practice" (National Academies' Report "Facilitating Interdisciplinary Research, 2004" and the NSF Interdisciplinary Research web site). The proposal must be motivated by a compelling research question (within the fields of social, behavioral and economic sciences) that requires an interdisciplinary approach for successful investigation. As a result, applicants should demonstrate the need for new or additional skills and expertise beyond his or her core doctoral experience to achieve advances in the proposed research. To acquire the requisite skills and competencies (which may or may not be within SBE sciences), a mentor in the designated field must be selected so that the postdoctoral research fellow and his or her mentor will complement, not reinforce, each other's expertise. Proposals in the IBSS track will be evaluated on three general dimensions of interdisciplinarity: first, the interdisciplinarity of the Fellow-Mentor team; second, the research approach used, emphasizing the integration of different kinds of methods from different fields; and third, the expected intellectual significance of the research results, emphasizing the degree to which results would enhance theories or methodological approaches (or both) or have other stimulating and catalytic impact across a range of fields. Successful proposals will demonstrate the integral role that the mentor will play in advancing the postdoctoral applicant's investigation of driving research questions and future career development. Please also see the Dear Colleague Letter issued by NSF/SBE (NSF 12-030) for more details on interdisciplinary research in the SBE sciences.

In addition to the scientific research, all proposals for this track (SPRF-IBSS) must include a specific section with the heading "Why this project requires interdisciplinary training beyond my core doctoral experiences".

#### A. Location of Work (Host Institution, same as Awardee Organization)

The Fellow must affiliate with a host institution during the entire tenure of the fellowship, and the Fellowship proposal must be submitted through this institution. Research and training supported by the SBE Postdoctoral Research Fellowships may be conducted at the following types of institutions:

- Universities and Colleges Universities and two- and four-year colleges (including community colleges) accredited in, and having a campus located in the US, acting on behalf of their faculty members. Such organizations also are referred to as academic institutions.
- Non-profit, non-academic organizations: Independent museums, observatories, research labs, professional societies and similar organizations in the U.S. associated with educational or research activities.

Note: The "Location of Work" does not constrain the Fellow to spend the entire Fellowship tenure at that location. If required for the project, the Fellow can spend extended periods of time outside of the official location of work; for example, travel to other locations or to foreign countries, as needed for data collection, field research, or collaborative activities, will be allowed. International research activities and collaboration are welcome. Under specific guidelines from NSF's Office of International Science and Engineering (OISE), extra travel and research expenses may be allowed. See <a href="http://www.nsf.gov/od/oise/iprffapp.jsp">http://www.nsf.gov/od/oise/iprffapp.jsp</a> for details.

## B. Sponsoring Scientist(s)/Mentor(s)

The SPRF is a supervised research award, and each Fellow must have at least one Sponsoring Scientist (also known as Mentor), who is a faculty member at the submitting organization. The Sponsoring Scientist(s) should be chosen with great care as they are crucial to the success of the proposal. If a Fellow has more than one mentor, then one of the mentors must be chosen as the "Lead Mentor" and this person must be a faculty member at the submitting organization, while additional mentors may be from other intuitions. Regardless of the number of mentors, the fellowship proposal requires a single (combined) Sponsoring Scientist statement, incorporated into the 10-page Project Description as a separate section with the heading "Sponsoring Scientist Statement".

Any changes in scope, location or sponsorship after an award is made must be approved by NSF via the "Change in Scope" or "PI Transfer" modules in FastLane.

## III. AWARD INFORMATION

**Duration and Tenure:** The fellowships are for two years. Fellowship tenure begins on the first of the month only and may commence at the Fellow's request between June and September of the award year. Fellowships may not be renewed. NSF enables career-life balance through a variety of mechanisms. Support to address dependent care issues may be available for awardees. For more information, please see <a href="http://www.nsf.gov/career-life-balance/">http://www.nsf.gov/career-life-balance/</a>.

Budget: The fellowship budget should include the following:

- 1. An annual salary of \$45,000 for the Fellow, plus fringe benefits per institutional rates.
- 2. Research and travel expenses up to \$10,000 per year. Travel expenses are meant for the Fellow, but may include no more than one trip for the Mentor(s), if justified and necessary for the project.
- 3. Applicable indirect costs based on the awardee's current Federally negotiated indirect cost rate agreement.
- Additional travel expenses of up to \$10,000 may be requested if the Fellowship project includes an international component. See <a href="http://www.nsf.gov/od/oise/iprffapp.jsp">http://www.nsf.gov/od/oise/iprffapp.jsp</a> for details.

## IV. ELIGIBILITY INFORMATION

#### Organization Limit:

Proposals may only be submitted by the following:

- Universities and Colleges Universities and two- and four-year colleges (including community colleges)
  accredited in, and having a campus located in the US, acting on behalf of their faculty members. Such
  organizations also are referred to as academic institutions.
- Non-profit, non-academic organizations: Independent museums, observatories, research labs, professional societies and similar organizations in the U.S. associated with educational or research activities.

## PI Limit:

The Fellowship applicant must be a U.S. citizen, national, or legally admitted permanent resident alien of the United States and meet the additional criteria listed below in the program solicitation.

#### Limit on Number of Proposals per Organization:

None Specified

## Limit on Number of Proposals per PI: 1

The Fellowship candidate may be part of only one proposal, regardless of role (PI, co-PI, or Senior Personnel).

### Additional Eligibility Info:

SBE Postdoctoral Research Fellowship candidates must meet all the following criteria:

- Be a U.S. citizen, national, or legally admitted permanent resident alien of the United States.
- Obtained the Ph.D. degree within 24 months before the SPRF application deadline date, or will obtain the Ph.D. degree within 10 months after the SPRF application deadline date.
- · Not already in a full-time tenure-track faculty position.

## V. PROPOSAL PREPARATION AND SUBMISSION INSTRUCTIONS

## A. Proposal Preparation Instructions

**Full Proposal Preparation Instructions:** Proposers may opt to submit proposals in response to this Program Solicitation via Grants.gov or via the NSF FastLane system.

- Full proposals submitted via FastLane: Proposals submitted in response to this program solicitation should be prepared and submitted in accordance with the general guidelines contained in the NSF Grant Proposal Guide (GPG). The complete text of the GPG is available electronically on the NSF website at: <a href="http://www.nsf.gov/publications/pub\_summ.jsp?ods\_key=gpg">http://www.nsf.gov/publications/pub\_summ.jsp?ods\_key=gpg</a>. Paper copies of the GPG may be obtained from the NSF Publications Clearinghouse, telephone (703) 292-7827 or by email from nsfpubs@nsf.gov. Proposers are reminded to identify this program solicitation number in the program solicitation block on the NSF Cover Sheet For Proposal to the National Science Foundation. Compliance with this requirement is critical to determining the relevant proposal processing guidelines. Failure to submit this information may delay processing.
- Full proposals submitted via Grants.gov: Proposals submitted in response to this program solicitation via Grants.gov should be prepared and submitted in accordance with the NSF Grants.gov Application Guide: A Guide for the Preparation and Submission of NSF Applications via Grants.gov. The complete text of the NSF Grants.gov Application Guide is available on the Grants.gov website and on the NSF website at: (http://www.nsf.gov/publications/pub\_summ.jsp? ods\_key=grantsgovguide). To obtain copies of the Application Guide and Application Forms Package, click on the Apply tab on the Grants.gov site, then click on the Apply Step 1: Download a Grant Application Package and Application Instructions link and enter the funding opportunity number, (the program solicitation number without the NSF prefix) and press the Download Package button. Paper copies of the Grants.gov Application Guide also may be obtained from the NSF

#### **Application Preparation Instructions:**

All page limits include pictures, figures, tables, graphics, etc. Applicants are urged to take special care to strictly adhere to page limitations. Proposals that do not conform to the requirements will be returned without review.

From the applicant, a complete postdoctoral fellowship proposal consists of:

- · Cover Sheet Program Solicitation, Directorate, and Program should be selected. The Fellowship applicant and his or her mentor ("Sponsoring Scientist") should be listed as PI and co-PI, in any order suitable and acceptable to the submitting organization. If the submitting organization's internal rules prohibit the Fellowship applicant to be named as PI or co-PI, then the Fellow applicant can be named "Senior Personnel".
- Biographical Sketches limited to two pages for each person, following NSF format as per GPG, for the Fellowship Applicant and the Sponsoring Scientist(s).
- Abstract of Ph.D. Thesis Research (Supplementary Docs one page)
- Project Summary one page, and must explicitly and individually address both intellectual merit and broader impacts of the research and training plan. Note: Without the explicit mention and description of the intellectual merit and broader impacts
- in the project summary, the application will be returned without review.

  Project Description 10 pages maximum, which must include the Sponsoring Scientist Statement (see details of Project Description components in the next section).
- References Cited required as a separate form, outside of the 10-page limit.
- Current and Pending Support This proposal is considered a pending activity and should be listed on the form for all PIs
- Budget and Budget Justification Budgetary limitations apply (see details under the Budgetary Information section). Facilities, Equipment, and Other Resources As specified in Chapter II, Section C.2.i of the NSF Grant Proposal Guide, include an aggregated description of the resources that the organization will provide to the project, should it be funded. Such information must be provided in this section, in lieu of other parts of the proposal (e.g., budget justification, project description). The description should be narrative in nature and must not include any quantifiable financial information.
- Data Management Plan see http://www.nsf.gov/sbe/sbe\_data\_management\_plan.jsp.
- Postdoctoral Mentoring Plan This 1-page supplementary document must clearly present the Sponsoring Scientist's planned mentoring activities for the Fellow, for the Fellow's independent future career development and intellectual growth. Joint research activities of the Fellow and the mentor(s) should not be presented in detail here - the right place for those details is the "Sponsoring Scientist Statement" within the 10-page Project Description.

#### Additional Instructions for Project Description

- · The project description addresses what the Fellow hopes to accomplish during the fellowship period and how it relates to her/his career goals. It also addresses how (for the BP Track) the participation of under-represented minorities will be increased in the field, in SBE sciences or beyond, or (for IBSS Track) how the project will impact some specific fields or potentially help the emergence of some new subfields at the intersection of several areas of scientific interest. The proposal should be developed in collaboration with the sponsoring scientist(s), but the planned research should be the independent work of the applicant, not part of ongoing work of the mentor(s).
- Limited amounts of teaching activity (no more than one course per year) may be incorporated into the proposal, if such teaching experience is valuable for the Fellow's future career development. In such cases the Sponsoring Scientist statement must include the motivation and justification for this teaching plan.

The project description should consist of:

- · An introduction or background section;
- A statement of research objectives, methods, and significance;
- A brief description of planned teaching or instructional activities, if any, with justification of why and how this activity is valuable for the Fellow:
- A statement of training objectives and career goals for the Fellow, and an explanation of how this project will help achieve those goals:
- · A justification of the choice of Sponsoring Scientist(s) and host institution;
- A specific section describing either the Broadening Participation or the Interdisciplinary nature of the project, as appropriate for Track I or Track II (see Section II.1 and II.2 of this document for details);
- A section entitled "Sponsoring Scientist Statement" detailing the involvement of the mentor(s) in the research project, and the mentor's justification for any proposed teaching activities for the Fellow. Note: A separate document containing general mentoring activities should be presented in the "Postdoctoral Mentoring Plan", which is to be submitted in the "Supplementary Documents" section, outside of the 10-page project description.

Applicants whose research involves human subjects or vertebrate animals must be aware of the regulations and guidelines pertaining to these types of research. Successful applicants must provide NSF with documentation that the research has been reviewed and approved by the appropriate institutional committees, giving assurance of compliance with all Federal policies on research using humans and the care and use of animals. These requirements are relevant to both laboratory and field projects. Acknowledgement of human subjects or use of animals in the research should be noted on the cover sheet. Documentation of approval for use of human subjects or vertebrate animal must be provided at the time an award is recommended.

Special certifications and permits must be provided when projects involve collecting in foreign countries, endangered species, or hazardous materials. Some applications may require other documentation before the final decision can be made, e.g., government permits, letters of collaboration, and commitments from private sources. Applicants must submit the information when requested by the NSF Program Officer managing the program.

## **B. Budgetary Information**

Cost Sharing: Inclusion of voluntary committed cost sharing is prohibited

#### Other Budgetary Limitations:

Other budgetary limitations apply. Please see the below budget preparation instructions.

## **Budget Preparation Instructions:**

The fellowship budget, prepared in consultation with the submitting institution's Sponsored Research Office, should include the following:

- An annual salary of \$45,000 for the Fellow, plus fringe benefits per institutional rates. The Fellow can be named as PI, co-PI or Senior Personnel, as per submitting institution's regulations. In order to comply with NSF's cost sharing policy, senior project personnel may no longer be listed in Section A of the NSF Budget with person-months entered, but no corresponding salary requested. Therefore, if the Sponsoring Scientist(s) is named as a PI or co-PI, their name(s) must be removed from Section A of the NSF Budget. A description of the Sponsoring Scientist(s) involvement in the project must be provided in the Project Description as described above. Research and travel expenses up to \$10,000 per year. Travel expenses are meant for the Fellow, but may include no more than one trip for the Mentor(s), if justified and necessary for the project. For projects involving significant international activities, extra travel and research expenses may be allowed under specific guidelines from NSF's Office of International Science and Engineering (OISE). See <a href="http://www.nsf.gov/od/oise/iprffapp.jsp">http://www.nsf.gov/od/oise/iprffapp.jsp</a> for details.
- · Applicable indirect costs based on the awardee's current Federally negotiated indirect cost rate.

## C. Due Dates

Full Proposal Deadline(s) (due by 5 p.m. proposer's local time):

October 29, 2012

Last Monday in October, Annually Thereafter

## D. FastLane/Grants.gov Requirements

• For Proposals Submitted Via FastLane:

Detailed technical instructions regarding the technical aspects of preparation and submission via FastLane are available at: <a href="https://www.fastlane.nsf.gov/a1/newstan.htm">https://www.fastlane.nsf.gov/a1/newstan.htm</a>. For FastLane user support, call the FastLane Help Desk at 1-800-673-6188 or e-mail fastlane@nsf.gov. The FastLane Help Desk answers general technical questions related to the use of the FastLane system. Specific questions related to this program solicitation should be referred to the NSF program staff contact(s) listed in Section VIII of this funding opportunity.

**Submission of Electronically Signed Cover Sheets.** The Authorized Organizational Representative (AOR) must electronically sign the proposal Cover Sheet to submit the required proposal certifications (see Chapter II, Section C of the Grant Proposal Guide for a listing of the certifications). The AOR must provide the required electronic certifications within five working days following the electronic submission of the proposal. Further instructions regarding this process are available on the FastLane Website at: https://www.fastlane.nsf.gov/fastlane.jsp.

For Proposals Submitted Via Grants.gov:

Before using Grants.gov for the first time, each organization must register to create an institutional profile. Once registered, the applicant's organization can then apply for any federal grant on the Grants.gov website. Comprehensive information about using Grants.gov is available on the Grants.gov Applicant Resources webpage: <a href="http://www07.grants.gov/applicants/app\_help\_reso.jsp">http://www07.grants.gov/applicants/app\_help\_reso.jsp</a>. In addition, the NSF Grants.gov Application Guide provides additional technical guidance regarding preparation of proposals via Grants.gov. For Grants.gov user support, contact the Grants.gov Contact Center at 1-800-518-4726 or by email: <a href="mailto:support@grants.gov">support@grants.gov</a>. The Grants.gov Contact Center answers general technical questions related to the use of Grants.gov. Specific questions related to this program solicitation should be referred to the NSF program staff contact(s) listed in Section VIII of this solicitation.

**Submitting the Proposal:** Once all documents have been completed, the Authorized Organizational Representative (AOR) must submit the application to Grants.gov and verify the desired funding opportunity and agency to which the application is submitted. The AOR must then sign and submit the application to Grants.gov. The completed application will be transferred to the NSF FastLane system for further processing.

## VI. NSF PROPOSAL PROCESSING AND REVIEW PROCEDURES

Proposals received by NSF are assigned to the appropriate NSF program where they will be reviewed if they meet NSF proposal preparation requirements. All proposals are carefully reviewed by a scientist, engineer, or educator serving as an NSF Program Officer, and usually by three to ten other persons outside NSF who are experts in the particular fields represented by the proposal. These reviewers are selected by Program Officers charged with the oversight of the review process. Proposers are invited to suggest names of persons they believe are especially well qualified to review the proposal and/or persons they would prefer not review the proposal. These suggestions may serve as one source in the reviewer selection process at the Program Officer's discretion. Submission of such names, however, is optional. Care is taken to ensure that reviewers have no conflicts of interest with the proposal.

## A. NSF Merit Review Criteria

All NSF proposals are evaluated through use of the two National Science Board (NSB)-approved merit review criteria: intellectual merit and the broader impacts of the proposed effort. In some instances, however, NSF will employ additional criteria as required to highlight the specific objectives of certain programs and activities.

The two NSB-approved merit review criteria are listed below. The criteria include considerations that help define them. These considerations are suggestions and not all will apply to any given proposal. While proposers must address both merit review criteria, reviewers will be asked to address only those considerations that are relevant to the proposal being considered and for which the

reviewer is qualified to make judgments.

## What is the intellectual merit of the proposed activity?

How important is the proposed activity to advancing knowledge and understanding within its own field or across different fields? How well qualified is the proposer (individual or team) to conduct the project? (If appropriate, the reviewer will comment on the quality of the prior work.) To what extent does the proposed activity suggest and explore creative, original, or potentially transformative concepts? How well conceived and organized is the proposed activity? Is there sufficient access to resources?

#### What are the broader impacts of the proposed activity?

How well does the activity advance discovery and understanding while promoting teaching, training, and learning? How well does the proposed activity broaden the participation of underrepresented groups (e.g., gender, ethnicity, disability, geographic, etc.)? To what extent will it enhance the infrastructure for research and education, such as facilities, instrumentation, networks, and partnerships? Will the results be disseminated broadly to enhance scientific and technological understanding? What may be the benefits of the proposed activity to society?

Examples illustrating activities likely to demonstrate broader impacts are available electronically on the NSF website at: <a href="http://www.nsf.gov/pubs/gpg/broaderimpacts.pdf">http://www.nsf.gov/pubs/gpg/broaderimpacts.pdf</a>.

Mentoring activities provided to postdoctoral researchers supported on the project, as described in a one-page supplementary document, will be evaluated under the Broader Impacts criterion.

#### Additional Solicitation Specific Review Criteria

SBE Postdoctoral Research Fellowship proposals will be reviewed by a panel of disciplinary and interdisciplinary experts as appropriate, spanning all areas of SBE sciences. Extra ad-hoc reviews may also be sought if deemed necessary. In addition to the regular NSF review criteria, reviewers/panelists will also consider the following criteria for Fellowship proposals:

- How does the project broaden the perspectives and experiences of the Fellowship applicant and prepare him or her for a research career?
- Is the Sponsoring Scientist a good match to the Fellow's proposed project, and does the Sponsoring Scientist's involvement
  in the project strike the right balance between supervisory guidance and the Fellow's independent growth?
- How well-developed are the Postdoctoral Mentoring Plan and the Data Management Plan?
- For Track I (BP): How do the proposed activities help increase (directly, indirectly, or both; via the research, or training and outreach activities, or both) the participation and advancement of under-represented groups in SBE fields or, in general, STFM fields?
- For Track II (IBSS): How do the proposed activities train the fellow in the interdisciplinary fields and what is the potential contribution of this research on the emerging field(s) identified by this proposal?

NSF staff also will give careful consideration to the following in making funding decisions:

#### Integration of Research and Education

One of the principal strategies in support of NSF's goals is to foster integration of research and education through the programs, projects, and activities it supports at academic and research institutions. These institutions provide abundant opportunities where individuals may concurrently assume responsibilities as researchers, educators, and students and where all can engage in joint efforts that infuse education with the excitement of discovery and enrich research through the diversity of learning perspectives.

## Integrating Diversity into NSF Programs, Projects, and Activities

Broadening opportunities and enabling the participation of all citizens -- women and men, underrepresented minorities, and persons with disabilities -- is essential to the health and vitality of science and engineering. NSF is committed to this principle of diversity and deems it central to the programs, projects, and activities it considers and supports.

## **B. Review and Selection Process**

Proposals submitted in response to this program solicitation will be reviewed by Ad hoc Review and/or Panel Review.

Reviewers will be asked to formulate a recommendation to either support or decline each proposal. The Program Officer assigned to manage the proposal's review will consider the advice of reviewers and will formulate a recommendation.

After scientific, technical and programmatic review and consideration of appropriate factors, the NSF Program Officer recommends to the cognizant Division Director whether the proposal should be declined or recommended for award. NSF is striving to be able to tell applicants whether their proposals have been declined or recommended for funding within six months. The time interval begins on the deadline or target date, or receipt date, whichever is later. The interval ends when the Division Director accepts the Program Officer's recommendation.

A summary rating and accompanying narrative will be completed and submitted by each reviewer. In all cases, reviews are treated as confidential documents. Verbatim copies of reviews, excluding the names of the reviewers, are sent to the Principal Investigator/Project Director by the Program Officer. In addition, the proposer will receive an explanation of the decision to award or decline funding.

In all cases, after programmatic approval has been obtained, the proposals recommended for funding will be forwarded to the Division of Grants and Agreements for review of business, financial, and policy implications and the processing and issuance of a grant or other agreement. Proposers are cautioned that only a Grants and Agreements Officer may make commitments, obligations or awards on behalf of NSF or authorize the expenditure of funds. No commitment on the part of NSF should be inferred from technical or budgetary discussions with a NSF Program Officer. A Principal Investigator or organization that makes financial or personnel commitments in the absence of a grant or cooperative agreement signed by the NSF Grants and Agreements Officer does so at their own risk.

## A. Notification of the Award

Notification of the award is made to *the submitting organization* by a Grants Officer in the Division of Grants and Agreements. Organizations whose proposals are declined will be advised as promptly as possible by the cognizant NSF Program administering the program. Verbatim copies of reviews, not including the identity of the reviewer, will be provided automatically to the Principal Investigator. (See Section VI.B. for additional information on the review process.)

## **B.** Award Conditions

An NSF award consists of: (1) the award letter, which includes any special provisions applicable to the award and any numbered amendments thereto; (2) the budget, which indicates the amounts, by categories of expense, on which NSF has based its support (or otherwise communicates any specific approvals or disapprovals of proposed expenditures); (3) the proposal referenced in the award letter; (4) the applicable award conditions, such as Grant General Conditions (GC-1); \* or Research Terms and Conditions and (5) any announcement or other NSF issuance that may be incorporated by reference in the award letter. Cooperative agreements also are administered in accordance with NSF Cooperative Agreement Financial and Administrative Terms and Conditions (CA-FATC) and the applicable Programmatic Terms and Conditions. NSF awards are electronically signed by an NSF Grants and Agreements Officer and transmitted electronically to the organization via e-mail.

\*These documents may be accessed electronically on NSF's Website at http://www.nsf.gov/awards/managing/award\_conditions.jsp? org=NSF. Paper copies may be obtained from the NSF Publications Clearinghouse, telephone (703) 292-7827 or by e-mail from nsfpubs@nsf.gov.

More comprehensive information on NSF Award Conditions and other important information on the administration of NSF awards is contained in the NSF Award & Administration Guide (AAG) Chapter II, available electronically on the NSF Website at <a href="http://www.nsf.gov/publications/pub\_summ.jsp?ods\_key=aag">http://www.nsf.gov/publications/pub\_summ.jsp?ods\_key=aag</a>.

#### **Special Award Conditions:**

If the Fellow accepts another position/employment, the Fellowship must be terminated prior to starting the new position, and all unused funds from this award returned to the NSF.

The Fellow must fulfill all requirements for the Doctoral degree before the official start date of the award; failure to do so will result in the cancellation of the grant.

## C. Reporting Requirements

For all multi-year grants (including both standard and continuing grants), the Principal Investigator must submit an annual project report to the cognizant Program Officer at least 90 days before the end of the current budget period. (Some programs or awards require more frequent project reports). Within 90 days after expiration of a grant, the PI also is required to submit a final project report, and a project outcomes report for the general public.

Failure to provide the required annual or final project reports, or the project outcomes report will delay NSF review and processing of any future funding increments as well as any pending proposals for that PI. Pls should examine the formats of the required reports in advance to assure availability of required data.

Pls are required to use NSF's electronic project-reporting system, available through FastLane, for preparation and submission of annual and final project reports. Such reports provide information on activities and findings, project participants (individual and organizational), publications, and other specific products and contributions. Pls will not be required to re-enter information previously provided, either with a proposal or in earlier updates using the electronic system. Submission of the report via FastLane constitutes certification by the PI that the contents of the report are accurate and complete. The project outcomes report must be prepared and submitted using Research.gov. This report serves as a brief summary, prepared specifically for the public, of the nature and outcomes of the project. This report will be posted on the NSF website exactly as it is submitted by the PI.

More comprehensive information on NSF Reporting Requirements and other important information on the administration of NSF awards is contained in the NSF Award & Administration Guide (AAG) Chapter II, available electronically on the NSF Website at <a href="http://www.nsf.gov/publications/pub\_summ.jsp?ods\_key=aag">http://www.nsf.gov/publications/pub\_summ.jsp?ods\_key=aag</a>.

#### **Special Reporting Requirements**

In the case of these fellowships, since the PI may be the Sponsoring Scientist rather than the Fellow, it is expected the reports will be created jointly by the Fellow and the Sponsoring Scientist. The actual submission on FastLane will be done by the PI.

Within 90 days after termination or expiration of the fellowship, the PI is required to submit a final project report via FastLane. All SPRF reports must contain a subsection on either broadening participation activities (for Track I) or interdisciplinary research impacts (for Track II), in the "Activities and Findings" section.

## **VIII. AGENCY CONTACTS**

Please note that the program contact information is current at the time of publishing. See program website for any updates to the points of contact.

General inquiries regarding this program should be made to:

• Fahmida N. Chowdhury - Program Officer, telephone: (703) 292-4672, email: fchowdhu@nsf.gov

Christina M. Jones - Science Assistant, telephone: (703) 292-2960, email: chjones@nsf.gov

For questions related to the use of FastLane, contact:

FastLane Help Desk, telephone: 1-800-673-6188; e-mail: fastlane@nsf.gov.

For questions relating to Grants.gov contact:

Grants.gov Contact Center: If the Authorized Organizational Representatives (AOR) has not received a confirmation
message from Grants.gov within 48 hours of submission of application, please contact via telephone: 1-800-518-4726; email: support@grants.gov.

#### IX. OTHER INFORMATION

The NSF Website provides the most comprehensive source of information on NSF Directorates (including contact information), programs and funding opportunities. Use of this Website by potential proposers is strongly encouraged. In addition, National Science Foundation Update is a free e-mail subscription service designed to keep potential proposers and other interested parties apprised of new NSF funding opportunities and publications, important changes in proposal and award policies and procedures, and upcoming NSF Regional Grants Conferences. Subscribers are informed through e-mail when new publications are issued that match their identified interests. Users can subscribe to this service by clicking the "Get NSF Updates by Email" link on the NSF web site.

Grants.gov provides an additional electronic capability to search for Federal government-wide grant opportunities. NSF funding opportunities may be accessed via this new mechanism. Further information on Grants.gov may be obtained at <a href="http://www.grants.gov">http://www.grants.gov</a>.

## ABOUT THE NATIONAL SCIENCE FOUNDATION

The National Science Foundation (NSF) is an independent Federal agency created by the National Science Foundation Act of 1950, as amended (42 USC 1861-75). The Act states the purpose of the NSF is "to promote the progress of science; [and] to advance the national health, prosperity, and welfare by supporting research and education in all fields of science and engineering."

NSF funds research and education in most fields of science and engineering. It does this through grants and cooperative agreements to more than 2,000 colleges, universities, K-12 school systems, businesses, informal science organizations and other research organizations throughout the US. The Foundation accounts for about one-fourth of Federal support to academic institutions for basic research.

NSF receives approximately 55,000 proposals each year for research, education and training projects, of which approximately 11,000 are funded. In addition, the Foundation receives several thousand applications for graduate and postdoctoral fellowships. The agency operates no laboratories itself but does support National Research Centers, user facilities, certain oceanographic vessels and Arctic and Antarctic research stations. The Foundation also supports cooperative research between universities and industry, US participation in international scientific and engineering efforts, and educational activities at every academic level.

Facilitation Awards for Scientists and Engineers with Disabilities provide funding for special assistance or equipment to enable persons with disabilities to work on NSF-supported projects. See Grant Proposal Guide Chapter II, Section D.2 for instructions regarding preparation of these types of proposals.

The National Science Foundation has Telephonic Device for the Deaf (TDD) and Federal Information Relay Service (FIRS) capabilities that enable individuals with hearing impairments to communicate with the Foundation about NSF programs, employment or general information. TDD may be accessed at (703) 292-5090 and (800) 281-8749, FIRS at (800) 877-8339.

The National Science Foundation Information Center may be reached at (703) 292-5111.

The National Science Foundation promotes and advances scientific progress in the United States by competitively awarding grants and cooperative agreements for research and education in the sciences, mathematics, and engineering.

To get the latest information about program deadlines, to download copies of NSF publications, and to access abstracts of awards, visit the NSF Website at <a href="http://www.nsf.gov">http://www.nsf.gov</a>

• Location: 4201 Wilson Blvd. Arlington, VA 22230

• For General Information (703) 292-5111 (NSF Information Center):

• TDD (for the hearing-impaired): (703) 292-5090

• To Order Publications or Forms:

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or telephone: (703) 292-7827

• To Locate NSF Employees: (703) 292-5111

## PRIVACY ACT AND PUBLIC BURDEN STATEMENTS

The information requested on proposal forms and project reports is solicited under the authority of the National Science Foundation Act of 1950, as amended. The information on proposal forms will be used in connection with the selection of qualified proposals; and project reports submitted by awardees will be used for program evaluation and reporting within the Executive Branch and to Congress. The information requested may be disclosed to qualified reviewers and staff assistants as part of the proposal review process; to proposer institutions/grantees to provide or obtain data regarding the proposal review process, award decisions, or the administration of awards; to government contractors, experts, volunteers and researchers and educators as necessary to complete assigned work; to other government agencies or other entities needing information regarding applicants or nominees as part of a joint application review process, or in order to coordinate programs or policy; and to another Federal agency, court, or party in a court or Federal administrative proceeding if the government is a party. Information about Principal Investigators may be added to the Reviewer file and used to select potential candidates to serve as peer reviewers or advisory committee members. See Systems of Records, NSF-50, "Principal Investigator/Proposal File and Associated Records," 69 Federal Register 26410 (May 12, 2004), and NSF-51, "Reviewer/Proposal File and Associated Records," 69 Federal Register 26410 (May 12, 2004), Submission of the information is voluntary. Failure to provide full and complete information, however, may reduce the possibility of receiving an award.

An agency may not conduct or sponsor, and a person is not required to respond to, an information collection unless it displays a valid Office of Management and Budget (OMB) control number. The OMB control number for this collection is 3145-0023. Public reporting burden for this collection of information is estimated to average 12 hours per response, including the time for reviewing instructions. Send comments regarding the burden estimate and any other aspect of this collection of information, including suggestions for reducing this burden, to:

Suzanne H. Plimpton Reports Clearance Officer Division of Administrative Services National Science Foundation Arlington, VA 22230

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Last Updated: 11/07/06 Text Only